

REMARKS

The claims are 1, 6, 8, 10, 11-15, 20, 22 and 24-30, with claims 1 and 15 being independent. Claims 1 and 15 have been amended to better define the intended invention. Reconsideration of the claims is respectfully requested.

Claims 1, 6, 8, 12-15, 20, 22 and 26-30 were rejected as obvious over Tanimura '175, optionally in view of Ikeda '748 and Tomoyasu '103. Claims 10, 11, 24 and 25 were rejected as obvious over Tanimura '175, optionally in view of Ikeda and Tomoyasu '103 and further in view of Kanai '257. The rejections are respectfully traversed.

Initially the Examiner noted that the phrase "heating element . . . in an exhaust line" is said to include an element enclosed within the exhaust line or a heater incorporated as part of the wall of the exhaust line as illustrated by Tanimura Figs. 2 or 4. To clarify that issue, the claims were amended to provide the heating element is enclosed by the exhaust line, rather than as part of the exhaust line, see Fig. 1, page 16, lines 2-10 and page 20, lines 5-19.

In addition the instant plasma blocking means now consists of a metal member electrically grounded. See page 20, lines 21-27. This further distinguishes the present invention from elements which also employ a dielectric material which permit the baffle plates of aluminum to have a potential of zero volts when connected to a high frequency electrode.

The Examiner notes Tanimura has heating element 13 spaced within the wall of the exhaust line. This feature is not present in the claimed invention. Further,

Tanimura admittedly fails to teach or suggest an electrically grounded second metal as a plasma blocking means.

In Ikeda '784, coils and baffles are employed to react with residual gases. Ikeda fails to teach use of an exhaust gas processing system with a plasma CVD or plasma etching process. Only a photo of thermal CVD reaction is disclosed in Ikeda.

Accordingly, Ikeda does not deal with the problem of plasma infiltration when processing residual gases. In Ikeda there is no need for a plasma blocking means, since no plasma processing occurs. In Tanimura '175 there is no disclosure of a second metal member as a plasma blocking means spaced between the processing space and heating element to block plasma from reaching the heating element.

In Kanai '257 it is disclosed that the microwaves employed to generate plasma can leak. Accordingly, an isolation means in or near the film-forming chamber, col. 22, lines 43-44, is employed to prevent microwave leaks. In column 13 and column 14, a metal mesh isolates the microwave applicator from the microwave plasma. This mesh is generally employed within or near the processing space. There is no specific disclosure of the mesh employed in an exhaust line to shield a chemical reaction inducing means. There is no chemical reaction inducing means in Kanai. Accordingly, there is no teaching of the spatial relationship of the microwave mesh to a heating element in an exhaust line. Further, the microwave mesh of Kanai would have no use in Ikeda since no microwave-induced plasma is employed.

The defects of Tanimura and Ikeda are not remedied by Tomoyasu. In Tomoyasu a baffle plate is connected to a high-frequency electrode. Although the inner

portion of the baffle may be said to be made of metal, it is necessary that remaining portions be made of dielectric material in order that the potential of the baffle plate be zero.

Wherefore, it is submitted that none of the references, whether alone or combined, discloses or suggests the present claimed invention, nor renders it unpatentable. The claims should be allowed and the case passed to issue.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Peter Saxon", written over a horizontal line.

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